

# NOTES ON THE FLORA OF TEXAS WITH ADDITIONS AND OTHER SIGNIFICANT RECORDS. II

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## ABSTRACT

The following ten taxa are documented new to Texas: *Aster laevis* var. *purpuratus*, *Bidens alba* var. *radiata*, *Tridax procumbens*, *Raphanus raphanistrum*, *Calycanthus floridus* var. *glaucus*, *Lyonia lucida*, *Hyptis mutabilis*, *Lilium longiflorum*, *Lythrum lineare*, and *Myrtus communis*. Significant new collection records are provided for eight: *Hypochaeris glabra*, *Cyperus cephalanthus*, *Rhynchosia tomentosa*, *Quercus arkansana*, *Allium stellatum*, *Cuphea viscosissima*, *Oenothera elata* subsp. *hirsutissima*, and *Leptochloa dubia*. Taxa are listed alphabetically by family, genus, and species with comments and citation of voucher specimens.

## RESUMEN

Los siguientes diez taxa se citan nuevos para Texas: *Aster laevis* var. *purpuratus*, *Bidens alba* var. *radiata*, *Tridax procumbens*, *Raphanus raphanistrum*, *Calycanthus floridus* var. *glaucus*, *Lyonia lucida*, *Hyptis mutabilis*, *Lilium longiflorum*, *Lythrum lineare*, y *Myrtus communis*. Se hacen citas significativas de otros ocho nuevas recolecciones: *Hypochaeris glabra*, *Cyperus cephalanthus*, *Rhynchosia tomentosa*, *Quercus arkansana*, *Allium stellatum*, *Cuphea viscosissima*, *Oenothera elata* subsp. *hirsutissima*, y *Leptochloa dubia*. Los taxa se listan alfabéticamente por familia, género y especie con comentarios y cita de los especímenes testigo.

## INTRODUCTION

Floristic work in the Houston area and other east Texas counties, coupled with plants sent to the SBSC herbarium for identification, has revealed a number of plants new to Texas and significant new records for others.

Unless otherwise indicated, all collections cited in this paper are in the Spring Branch Science Center Herbarium (SBSC), Houston, Texas. Duplicates of some collections are at the other indicated herbaria. Herbarium acronyms follow Holmgren et al. (1990).

## ASTERACEAE

***Aster laevis*** L. var. ***purpuratus*** (Nees) A.G. Jones.—*Aster laevis* has been represented in Texas by the western variety *geyeri* in the Guadalupe Mts of Culberson Co. (Nesom 1993). Here we report variety *purpuratus*, the narrow leaved southeastern entity, from two east Texas counties. Thomas and Allen (1996)



mapped it in six, mostly north central, Louisiana parishes. Kartesz (1999) mapped it, as *Symphyotrichum laeve* (L.) A. & D. Love var *purpuratum* (Nees) Nesom, in Georgia, Alabama, Mississippi, Louisiana, Arkansas, and Texas. At the Polk County site, *A. laevis* var. *purpuratus* is distinguished from the similar and more numerous plants of *A. oolentangiensis* Riddel by smooth leaves in contrast to the harshly scabrous leaves of *A. oolentangiensis*.

Voucher specimens: **Polk Co.:** growing in a native calcareous prairie surrounded by pine-oak woods at the intersection of Lone Wolf Road and Windham Road, N of Hwy 1988 between Goodrich and Providence, S of Livingston, 30° 37'33"N and 94° 55'33"W, 28 Oct 2000, *Brown* 24913; same site, 23 Sep 1999, *Brown* 23563. **Tyler Co.:** collected in a calcareous prairie barren on U.S. Hwy 190, ca. 4.5 mi W of intersection with FM 92, 12 Jun 2000, *J. Ligio s.n.*

***Bidens alba* (L.) A. DC. var. *radiata* (Sch. Bip.) Ballard ex T.E. Melchert.**—Ballard (1986) divided the *B. pilosa* complex into three mostly tropical American species, namely *B. alba*, *B. odorata* Cav., and *B. pilosa* L. He mapped United States records of *B. alba* var. *radiata* in Florida and *B. pilosa* in California. Wunderlin (1998) reported *B. alba* var. *radiata* as common and distributed nearly throughout Florida. Gandhi and Thomas (1989) reported *B. pilosa* in Louisiana but indicated that Ballard's description of *Bidens alba* var. *radiata* was in concurrence with their description of *B. pilosa*. Thomas and Allen (1996) maintained *B. pilosa* in Louisiana and mapped it in thirteen parishes. We report *B. alba* var. *radiata* (sensu Ballard) from four Texas counties. There is a photograph of the taxon in Tveten and Tveten (1993).

Voucher specimens: **Cameron Co.:** common in a vacant lot in Brownsville, 1 Apr 1983, *Brown* 5954. **Chambers Co.:** along I-10 at the bridge over the Trinity River near the village of Wallisville, 29° 50' 12"N and 94° 39'08"W, 8 Oct 2000, *Brown* 24801. **Harris Co.:** weed along Old Katy Rd at Bunker Hill in Houston, 19 Oct 1990, *Tveten b-390*; weedy plants at the intersection of Dell Dale and Brentwood Streets in Channelview, 21 May 1992, *Brown* 16084. **Montgomery Co.:** edge of small woodland next to parking lot near Woodlands Parkway, 1/4 mi W of I 45, 8 Dec 2001, *E. Keith* 31.

***Hypochaeris glabra* L.**—Diggs et al. (1997) reported this European weed new to Texas from Williamson County. Since then additional collections have been made in other regions of the state.

Voucher specimens: **Harris Co.:** weedy plants in a subdivision adjacent to a small native prairie at intersection of Greenhouse Rd and FM 529, 29° 52'42"N and 95° 42'14"W, 12 Mar 1999, *Brown* 22866; plants on sandy soil in pasture on south side of the Harris County Katy Park, N of Katy, 29° 48'34"N and 95° 48'20"W, 14 Apr 2001, *Brown* 25083. **Leon Co.:** growing on sandy soil in the Boykin Cemetery off of Hwy 831 between Oakwood and Flo, 18 Apr 2001, *Brown* 25090. **Waller Co.:** on sandy soil at the intersection of Holik Rd and Hwy 1887, west of the Monaville cemetery and between Hempstead and Pattison, 29° 56'58"N and 96° 04'51"W, 8 May 2002, *Brown* 26702.

***Tridax procumbens* L.**—Kartesz (1999) reported this exotic and federal noxious weed in Florida and Hawaii. Wunderlin (1998) reported it frequent in the central and southern peninsula of Florida. John Tveten recently sent a collection of it from the Valley Nature Center in Hidalgo County for identification. Regarding the history of the plant in Texas, the following communication was



received from Ken King and Martin Hagne of the Valley Nature Center; "Seed was collected in the Brownsville area by a native grower several years ago. That grower is no longer in the area and we do not know the exact Brownsville location. The plants at the Valley Nature Center were planted here from those seedlings. This comp is growing in empty lots throughout Weslaco and has been in the area for at least fifteen years. We have seen several local establishments around town. There are at least two south Texas counties that have communities of this plant; Hidalgo and Cameron." Alfred Richardson (1995) did not include this taxon for the Rio Grande Delta area.

Voucher specimen: **Hidalgo Co.:** spreading along trails in open spots in mesquite bush in the Weslaco Valley Nature Center, 20 Nov 2001, *Tveten s.n.*

## BRASSICACEAE

**Raphanus raphanistrum** L.—Rollins (1993) distinguished the genus *Raphanus* by a segmented fruit with the lower segment inconspicuous and seedless. The petal colors vary from white, yellow, lilac, to violet. Rollins (loc cit.) reported two introduced weedy species in North America, *R. raphanistrum* and *R. sativa*. He indicated that in *R. raphanistrum* the fruits are linear, longitudinally grooved, and strongly constricted between the seeds. The petals are yellow and fade to whitish or white. In *R. sativus* the fruit body is widest at the base, smooth or very slightly grooved, and is not or only poorly constricted between the seeds. The petals are usually purple. The petal veins are prominent in yellow flowered *R. raphanistrum*, which can distinguish it from yellow petaled plants of *Brassica* and *Sinapsis*, if one does not notice the small lower fruit segment. Kartesz (1999) mapped it in Texas *fide* Gould (1975a) but no voucher was provided. It is not listed in Correll and Johnston (1970) nor any of the recent checklists. We report voucher material with the traits of *R. raphanistrum* from three Texas counties. Thomas & Allen (1996) mapped *R. raphanistrum* in numerous northern and southern Louisiana parishes. Two of these parishes are adjacent to Texas. In contrast, *R. sativus* is known from only seven parishes. Wunderlin (1998) found *R. raphanistrum* more common in Florida than *R. sativa*. A reexamination of Texas material may reveal the same situation in Texas.

Voucher specimens: **Fort Bend Co.:** yellow flowered weedy plant along a gravel road above a drainage ditch at extreme SW edge of Barker Reservoir, ca. 1/2 mi E of Mason Rd and ca. 1/2 mi N of FM 1093, 10 Mar 1995, *Brown 18435*. **Harris Co.:** Brays Bayou at Buffalo Speedway in Houston, 18 Mar 2000, *D. Johnson s.n.* **San Jacinto Co.:** collected along roadside of Hwy 945 near the Evergreen Cemetery in the village of Evergreen, 9 Mar 2001, *E. Keith s.n.*

## CALYCANTHACEAE

**Calycanthus floridus** L. var. **glaucus** (Willd.) Torr. & A. Gray.—At least fifteen plants of this shrub are present in woods adjacent to the David and Patricia Lewis residence in Newton County. In a personal communication, the Lewises indicated that these plants were here when they established a residence on the



site. Thomas and Allen (1996) were unsure of the native status of a collection from West Feliciana Parish, Louisiana. Likewise we are uncertain of their native status here; however, they are well established and naturalized shrubs and should be considered a member of the Texas flora.

Voucher specimens: **Newton Co.:** plants on a mesic slope woodland above Screw Pin Branch adjacent to CR 3062, W of Hwy 87 N of Bleakwood, 22 Jul 2000, *Brown & Elsik 24437* (SBSC, BRIT); same site, 13 Apr 1999, *Lewis, Lewis & Elsik 6169* (SBSC, TEX).

## CYPERACEAE

**Cyperus cephalanthus** Torr. & Hook.—Carter and McInnis (1993) reported the type locality of this sedge from somewhere near Galveston Bay. The type collection was made in 1835 and the species has not been recollected in Texas since. We here report a recent collection from Harris County. Richard Carter (VSC) has verified the identification.

Voucher specimen: **Harris Co.:** tall plants with thick stem in a moist prairie depression a few hundred feet SE of the Texas Chiropractic College, on the S side of Spencer Blvd, a few hundred feet E of Beltway 8 in Pasadena, 29°39'39"N and 95°08'50"W, 29 May 1999, *Brown 23076* (BRCH, SBSC, TEX).

This site is owned by the Harris County Flood Control District and is soon to be formed into a detention basin for downstream flood control along Armand Bayou. However, Ralph Taylor of the Flood Control Environmental Services has removed all plants from the site and replanted them in their nursery near Lake Houston. Plants have been given to the Mercer Arboretum and Botanic Gardens and to the Armand Bayou Nature Center for establishment on their lands.

## ERICACEAE

**Lyonia lucida** (Lam.) K. Koch.—Specimens of these shrubs, with flowers in March and fruits in summer, have been recently collected in Newton County. The shrubs were on the property of David and Patricia Lewis when they set up a residence north of Bleakwood. There was no evidence of a prior human occupation of the site. David has discovered six populations with well over a hundred total plants (per. comm.) along Screw Pin Branch. Fetterbush is native and common in the adjacent Sabine Parish of Louisiana (personal observation by the second author, Thomas and Allen 1996). It is our opinion that this is also a native population.

Voucher specimens: **Newton Co.:** shrubs along Screw Pin Branch, ca. 300 m W of Hwy 87, 1 mi N of the intersection with Hwy 363 in community of Bleakwood, 30°42'29"N and 93°49'34"W, 24 Mar 1999, *Lewis & Elsik 6168a* (SBSC, nine duplicates to be distributed to other herbaria); same site, 22 Jul 2000, *Brown & Elsik 24436*. (SBSC, BRIT).

## FABACEAE

**Rhynchosia tomentosa** (L.) Hook. & Arn.—Turner (1959), Correll and Johnston (1970), Johnston (1990), Hatch et al. (1990), Jones et al. (1997), and Isely (1998) all reported this legume for Texas. Turner (1959) reported a collection by Charles



Wright that lacks locality data. Isely (1998) did not map it in the state. It is also not mapped in the state by Turner et al. (in press). We here report an authentic Texas collection from what is now the Little Rocky Preserve of The Nature Conservancy of Texas.

Voucher specimen: **Jasper Co.:** Little Rocky Nature Conservation area, 13 mi N of Jasper on Hwy 96 to Browndel, then ca. 3 mi E of Browndel on Hwy 1007, 15 Aug 1982, *Peterson 631*.

### FAGACEAE

**Quercus arkansana** Sarg.—Hunt et al. (1995) first reported this oak as new to Texas. They found two small populations in Cass County and an historical record for Jasper County. We here report recent collections from Jasper and Hardin counties. Jensen (1997) mapped it in the extreme northeast and southeast portions of the state.

Voucher specimens: **Jasper Co.:** deep sandy hillside about 2 mi N of the end of FM 2800, NW of Jasper in the headwaters of Hog Creek, 3 Jul 2001, *E. Keith 11b*.

### LAMIACEAE

**Hyptis mutabilis** (Rich.) Briq.—Kartesz (1999) reported this exotic weed in seven southeastern states from Virginia to Louisiana. Thomas and Allen (1998) mapped it in three parishes east of the Mississippi River. We here report a collection for Texas.

Voucher specimen: **Liberty Co.:** plants growing in a fenced field on S side of the Davis Hill Salt Dome adjacent to the Davis Hill Estates subdivision, east of Cleveland and off of Hwy 105, 30° 18'32"N and 94° 51'01"W, 5 Jul 1999, *Brown 23169*.

### LILIACEAE

**Allium stellatum** Ker.—Turner et al. (in press) mapped this onion in five, mostly north central Texas counties. We here report collections far south of those mapped.

Voucher specimens: **Polk Co.:** in a native prairie surrounded by pine-oak forest along Lone Wolf Rd N of Hwy 1988 between Goodrich and Hwy 146 S of Livingston, 17 Nov 1996, *Brown 19809*. **Brazos Co.:** population of red flowered plants on a gravel slope above Lick Creek, NE of the intersection of Hwy 6 and Greens Prairie Rd, probably within the city limits of College Station, 2 Nov 2001, *Brown 26401* (SBSC, TAMU).

**Lilium longiflorum** Thunb.—In the summer of 2000, we found this tall white flowered plant to be common and conspicuous along roadsides near Newton. It is also found as an escape from cultivation in Alabama, Florida, and Utah (Kartesz 1999). We identified it to this species with the key in Wunderlin (1998). Thomas and Allen (1993) reported *L. formosum* in Louisiana, but our plants have the totally white flowers of *L. longiflorum*, in contrast to the red-purple outer perianth of *L. formosum*.

Voucher specimens: **Newton Co.:** growing along the gravel CR 3062 between Screw Pin Branch and



Thickety Creek, west of Hwy 87, N of Bleakwood, 22 July 2000, *Brown & Elsik* 24438. **Tyler Co.:** 1.1 mi N of jct Hwy 190/FM 256 W of Woodville, 3 Aug 1991, *Schultz* 061.

## LYTHRACEAE

**Cuphea viscosissima** Jacq.—Correll and Johnston (1970) reported Blue Waxweed in Texas but without a specific locality. Graham (1975) eliminated it from Texas, as did Johnston (1990), Hatch et al. (1990), Jones et al. (1997), Kartesz (1999), and Turner et al. (in press). We here report a voucher to confirm its presence in Texas.

Voucher specimen: **San Augustine Co.:** 8 mi W of San Augustine on Hwy 21, then 1 mi S, Weches formation, 16 Jul 1976, *George & Nixon* 43 (SBSC, ASTC).

**Lythrum lineare** L.—Correll and Johnston (1970), Graham (1975), Johnston (1990), Hatch et al. (1990), Jones et al. (1997), and Turner et al. (in press) did not report this species in Texas. However, Kartesz (1999) listed Texas within its distribution. We provide two vouchers to support its presence in the state. The identification was verified by S. Graham (KE).

Voucher specimens: **Chambers Co.:** Anahuac National Wildlife Refuge, brackish marsh in the Jackson Ditch Unit, 29°35'24"N and 94°25'09"W, 3 Oct 2000, *Brown* 24774; Anahuac National Wildlife Refuge, brackish marsh in the East Unit, 29°39'N and 94°28'W, 20 Jul 2000, *Brown* 24399 (SBSC, KE).

## MYRTACEAE

**Myrtus communis** L.—Kartesz (1999) did not report this cultivated ornamental plant as occurring wild in the United States. The first author found many well developed shrubs scattered across a salt dome in coastal Texas. These plants had mature fruits and were rather large, suggesting they have been here for some time. The salt dome is isolated and surrounded by a coastal prairie and is for the most part undeveloped except for some old machinery and buildings associated with prior oil extraction.

Voucher specimen: **Brazoria Co.:** shrubs with fruits along gravel road to the center of Hoskins Mound, Galveston-Brazoria Key Map 861 D and H, near 29°08'26"N and 95°13'26"W, 6 Aug 2000, *Brown* 24588 (SBSC, TEX, ASU).

## ONAGRACEAE

**Oenothera elata** Kunth subsp. **hirsutissima** (A. Gray ex S. Wats.) W. Dietr.—Dietrich et al. (1997) mapped this taxon largely in Trans-Pecos Texas with one collection from the Panhandle. They also mapped three populations in east Texas in Anderson, Brazos, and Leon counties. Plants matching the key traits and description of this taxon have been collected in Harris and Liberty counties. They are more common on sandy soil in Liberty County. These are tall plants with large yellow flowers whose stigmas are elevated above the stamens.

Voucher specimens: **Harris Co.:** tall herb along Hwy 59 at the San Jacinto River bridge, 28 Jul 1991, *Gregg s.n.* **Liberty Co.:** plants growing on sands along the Trinity River at the Hwy 105 bridge west of Moss Hill, 30°16'39"N and 94°47'57"W, 1 Oct 2000, *Brown* 24758; along the Ace Hwy S of the village of Ace, across from the southern border of the Menard Creek Unit of the Big Thicket Biological Pre-



serve, 30°28'59"N and 94°50'19"W, 25 Aug 2000, *Brown 24680a*; tall plants with rather large flowers on deep sands along the Trinity River, Trinity River Nat Wildlife Refuge at Sevenmile Bend on the Davis Hill 7.5'quad, 30 Aug 1996, *Brown 19528*; large flowered primrose on dry sandy soil along CR 2252 near the Davis Hill Baptist Church E of Cleveland and N of Hwy 105, 15 Sep 1996, *Brown 19693*; a single tall plant at edge of Hwy 146, ca 3 mi N of Moss Hill, 21 Aug 1994, *Brown 18124*; tall weedy plants with large yellow flowers, along dirt road in the Dayton Lake Estates E of Hwy 1008, adjacent to the Trinity River, N of Dayton, 9 Sep 1994, *Brown 18180*.

## POACEAE

***Leptochloa dubia*** (H.B.K.) Nees.—Gould (1975b) reported this grass from all regions of the state except for the east Texas pineywoods and the post oak savannah area. We here report collections from two east Texas counties.

Voucher specimens: **Harris Co.:** plants on dark clay soil along a newly constructed road into a prairie at the intersection of Underwood St. and Fairmont Parkway in Deer Park, 29 Sep 1984, *Brown 8100*.

**Hardin Co.:** fairly frequent tall grasses on verge of hwy between village of Honey Island and Hwy 69/287, N of Kountze, 6 Sep 1996, *Brown 19565*.

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